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**NATIONAL PHOTOGRAPHIC
INTERPRETATION CENTER**

**BASIC
IMAGERY
INTERPRETATION
REPORT**

**PETROVKA NAVAL BASE AND
SHIPYARD (SHIPYARD ACTIVITIES,
DECEMBER 1976--APRIL 1978) (TSR)**

**STRATEGIC WEAPONS INDUSTRIAL FACILITIES
USSR
JULY 1978**

Top Secret

RCA-09/0019/78

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INSTALLATION OR ACTIVITY NAME					COUNTRY
Petrovka Naval Base and Shipyard (Shipyard Activities, December 1976--April 1978)					UR
UTM COORDINATES	GEOGRAPHIC COORDINATES	CATEGORY	BE NO.	COMIREX NO.	NIETB NO.
NA	43-07-03N 132-20-17E				
MAP REFERENCE					
SAC. USATC, Series 200, Sheet 0291-6, scale 1:200,000					
LATEST IMAGERY USED			NEGATION DATE (if required)		
			NA		

ABSTRACT

1. (TSR) This report describes significant activity at Petrovka Naval Base and Shipyard, USSR, from December 1976 through April 1978. The earliest imagery in this time period was obtained on [redacted] This report updates NPIC report [redacted] dated May 1977.

2. (TSR) Significant activity includes the fitting-out of D-I nuclear-powered ballistic missile submarines (SSBNs), the maintenance/overhaul of Y SSBNs and V-I nuclear-powered attack submarines (SSNs), and the overhaul/modification of E-II cruise missile submarines (SSGNs) and Z attack submarines (SSs). Facility changes during this reporting period included the completion of a repair hall, the identification of a second repair hall under construction, and the construction of an engineering/light fabrication building, an administration building with storage wings, and two civil defense areas.

3. (TSR) This report contains four annotated photographs and an order-of-battle table by reporting position of combatants and selected auxiliaries. Also included is an updated layout of the shipyard showing the order-of-battle reporting position and a functional area analysis.

BASIC DESCRIPTION

Status/Activity

4. (TSR) The first repair hall (Figures 1 and 2), designated repair hall 1, was externally complete by early 1976 and was operational by [redacted] when a Y SSBN was placed inside the hall, probably on the north set of rails. The new transverser, completed in October 1976,¹ was used for the first time during the transfer of this Y SSBN to the repair hall.

5. (TSR) Between [redacted] a large portion of the upper door track and supports on the north side of repair hall 1 were removed, probably to facilitate the emplacement of the uprights for construction of repair hall 2 since space between the two halls was limited. The removal of the sections and the presence of a security fence around the construction area of repair hall 2 preclude sliding the doors of repair hall 1 to the north during the current stage of construction.

6. (TSR) Dismantlement of the old transverser carriage had begun by [redacted] and it was almost complete by [redacted] Even though the trackage for the transverser extension is double that of the original, the new transverser carriage is able to transit between the two. This double trackage was probably necessary to accommodate the weight of an SSBN entering the repair hall.

7. (TSR) Construction of repair hall 2 (Figure 3) began in the summer of 1975 but could not be identified as such until July 1977 when footings for uprights were observed. As of [redacted] six pairs of uprights had been emplaced. The dimensions of this new building are [redacted] Although this building is shorter than repair hall 1, it can accommodate all vessels capable of fitting into the basin (i.e., through the D-I SSBN). Footings being constructed between the north uprights of repair hall 2 and the adjacent steamlines indicate that an administration wing may also be added to this hall. The rail systems in front of the two repair halls are not the same. Repair hall 1 has three four-rail sets with 6-meter spacing. The sets are 2 meters apart. Repair hall 2 has a centerline set of rails with 6-meter spacing, but the sets on either side of the center set consist of 11 rails each (Figure 3). These cover a distance of 10 meters on either side of the center rails. However, the distance between any group of seven rails will provide a 6-meter spacing. The inner rails of the two outer rail sets are 2 meters from the center set, and there is a 5-meter clearance between the outermost rails and the building uprights. This building will probably be able to hold three submarines simultaneously.

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8. (TSR) Construction continued on the administration-type building and two attached sheds/warehouses adjacent to reporting position (RP) 23. The administration-type building is four stories high and is [redacted] The shed/warehouse extensions are each [redacted]

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9. (TSR) A new civil defense area, designated area 1 (Figures 1 and 2), is under construction north of the shipyard. It contains a probable engineering building with a light fabrication/shop wing. The engineering building is [redacted] The light fabrication/shop wing is [redacted] A basement shelter was constructed under the engineering section of the building, and an additional subsurface personnel shelter is being constructed north of the building. Heating lines are being installed which seem to tie this building to the base. Another new civil defense area, designated area 2, is northwest of the shipyard. Its proximity to the base may indicate an association between the two.

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Submarine Activity

Delta-Class SSBN

10. (TSR) The launching of D-I SSBNs at Komsomolsk Shipyard Amur 199 [redacted] and subsequent fitting-out at Petrovka continued through this reporting period. Although the launch of D-I SSBN unit 6 was never seen, it was confirmed by the movement of the ARD(T)--transporter dock--and launch support device.² Unit 6 was launched between [redacted] This unit probably left Komsomolsk by [redacted] fitted-out at Petrovka over the winter, and went on sea trials in February 1977. Unit 7 was launched by [redacted] and left Komsomolsk by [redacted]. It fitted-out at Petrovka and went on sea trials in the fall of 1977. Unit 8 was launched by [redacted] and left Komsomolsk by [redacted]. It also went on sea trials in the fall of 1977.

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Y-Class SSBN

11. (TSR) Six Y-class SSBNs were in various stages of overhaul/repair during this reporting period; three of these were completed. Each Y SSBN will be discussed in the order of arrival at the shipyard. A Y SSBN with a light-toned sonar belt which had arrived at RP 22 between [redacted] remained at that position at least through [redacted] On [redacted] a Y SSBN with a dark-toned sonar belt was at RP 22. This was either the same submarine with the sonar coated or a new arrival. Whichever the case, this submarine departed the shipyard between [redacted]

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12. (TSR) The Y SSBN which arrived at RP 2 during February 1976 continued its overhaul. Between [redacted] the Y SSBN was moved to RP 1, but by [redacted] it had returned to RP 2. By [redacted] this unit had moved to RP 4 where it apparently stayed until [redacted] A Y SSBN was on the basin shelf (RP 11) on [redacted] but RP 4 was not imaged; however, on [redacted] coverage, the Y SSBN was still on the shelf, and the Y SSBN previously at RP 4 was gone, indicating that the submarine at RP 4 had probably moved to RP 11. By [redacted] the Y SSBN on the shelf had departed the base.

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13. (TSR) The Y SSBN which began overhaul at RP 6 in January or February 1976 remained in overhaul during this reporting period. By [redacted] this unit was on the basin shelf with scaffolding around the forward one-third of the hull and the sail planes removed. The screw propellers had been removed by [redacted] were positioned south of the basin inner gate, remained there through [redacted] were gone. Between [redacted] this submarine was moved into the repair hall. The scaffolding that had surrounded the submarine remained on the shelf and precluded launching the submarine into the basin (Figure 4). This unit has been in the hall for the remainder of the reporting period.

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14. (TSR) A Y SSBN arrived at RP 4 by [redacted] was in the ARD(T) at RP 2. Plating had been removed in the area of the machinery spaces by [redacted] By [redacted] the submarine was out of the ARD(T), and by [redacted] a partial work platform was being built around the reactor area. This unit left the shipyard between [redacted] and was replaced by a Y SSBN which will be discussed later.

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15. (TSR) On [redacted] transfer dollies were positioned on the shelf to receive a submarine. On [redacted] a Y SSBN was observed on the basin shelf where it remained through at least [redacted] On the basis of the [redacted] observations, this unit appeared to be a new arrival at the facility. This unit possibly went on the shelf for preoverhaul/repair inspection, since on [redacted] the basin was flooded, and by [redacted] the submarine was at the slanted pier (RP 22). By [redacted] some deck plating had been removed. By [redacted] the submarine had departed Petrovka.

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Key to Symbols

NO	Not Observed
CC	Control Element
MA	Major
ED	Elementary

* Basic information only (no longer listed)

*** V. 2000 revision (no control)

•	Both systems apply in the cell
•	Control in shipping zone
•	Excess baggage

1977 1978

Key to Symbols	
MC	more common
CC	could have to
NA	not
EO	end of page only

* Some sentences with trailing blank field	* Blank addresses in the text
** From a page of code	** I used it's disassembled form
*** I think moved the second flag	*** Could have detected

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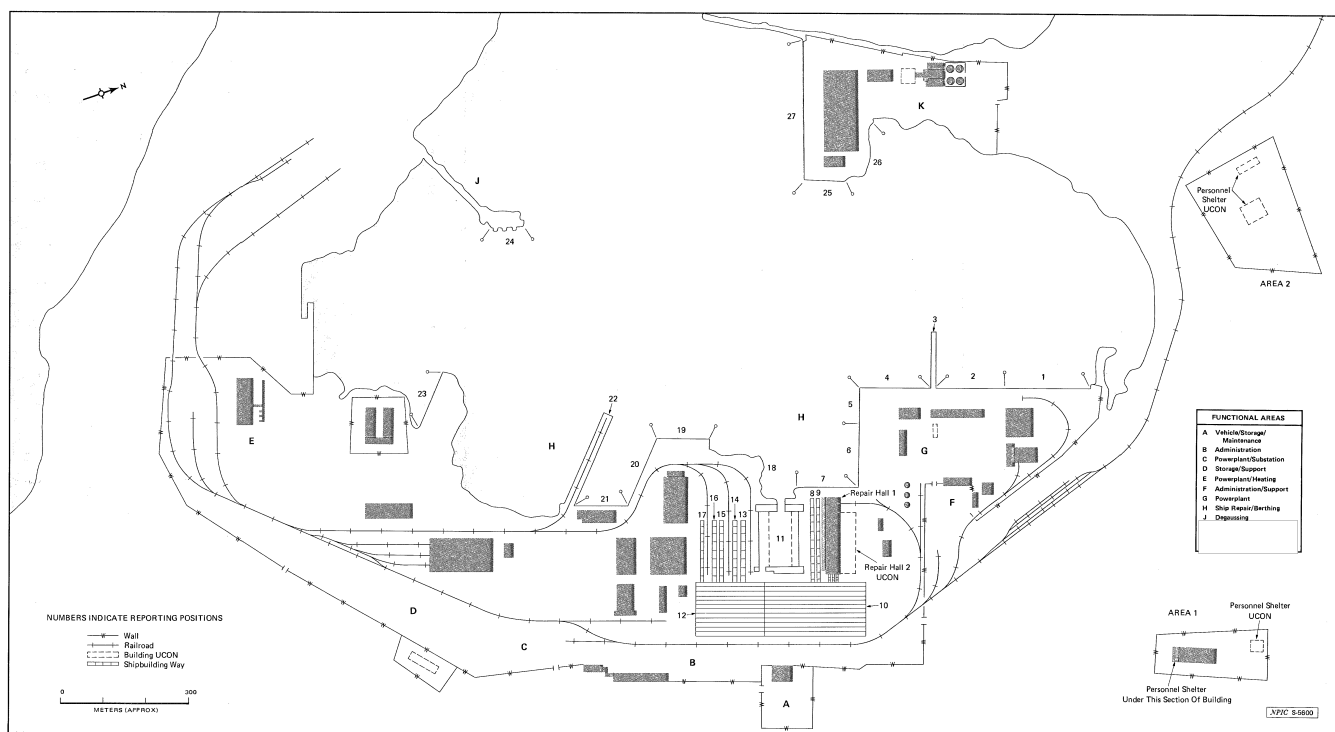


FIGURE 2. LAYOUT OF PETROVKA NAVAL BASE AND SHIPYARD

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Table 1. (Continued)
This table in its entirety is classified TOP SECRET RUFF
1978

Reporting Position 1	D-I SSBN	D-I SSBN	HA	Y-SSBN YD	Y-SSBN YD	Y-SSBN YD	ARD(T)
2	Y SSBN ZEYA YRSN	Y SSBN	Y SSBN PM-124 YRSN ZEYA YRSN	IDO	Y SSBN PM-124 YRSN ZEYA YRSN	Y SSBN PM-124 YRSN ZEYA YRSN	Y SSBN PM-124 YRSN
3	T-43 AGH YD	T-43 AGH ZEYA YRSN YD	T-43 AGH Y SSBN YD	IDO	T-43 AGH	T-43 AGH	ZEYA YRSN Y SSBN T-43 AGH
4	ARD(T)	ARD(T)	ARD(T)	IDO	ARD(T)	ARD(T)	ARD(T) w/ D-I SSBN
5	PM-124 YRSN	PM-124 YRSN		IDO			
6	N SSN	N SSN	N SSN	IDO	N SSN		ZEYA YRSN
7				IDO			
8	YFL 2 RSBs	YFL 2 RSBs	YFL 2 RSBs	IDO	YFL 2 RSBs	YFL 2 RSBs	2 RSBs
9				IDO			
10				IDO			
11	Z-V SS Dollies	Z-V SS Dollies	Z-V SS Dollies	IDO	Z-V SS on shelf		
12				IDO			
13				IDO	Z-V SS	Z-V SS	Z-V SS
14	E-II SSGN	E-II SSGN	E-II SSGN	IDO	E-II SSGN	E-II SSGN	E-II SSGN
15	E-II SSGN	E-II SSGN	E-II SSGN	IDO	E-II SSGN	E-II SSGN	E-II SSGN
16	V-I SSN	V-I SSN	V-I SSN	IDO	V-I SSN	V-I SSN	V-I SSN
17	Pier sect Ucon	Pier sect	Pier sect	IDO	Pier sect	Pier sect	Pier sect
18	RSB	RSB	RSB	IDO	RSB	RSB	RSB
19	VYN YRB PRUT ASR	VYN YRB PRUT ASR	VYN YRB PRUT ASR	IDO	VYN YRB PRUT ASR	VYN YRB PRUT ASR	VYN YRB PRUT ASR
20	PETYA-I FFL YD Z SSAG* Z SSAG	PETYA-I FFL YD Z SSAG* Z SSAG	PETYA-I FFL YD Z SSAG* Z SSAG	IDO	PETYA-I FFL YD Z SSAG* Z SSAG	PETYA-I FFL YD Z SSAG* Z SSAG	PETYA-I FFL YD Z SSAG* Z SSAG
21				IDO			
22	2 RSBs Y SSBN ZEYA YRSN	2 RSBs Y SSBN ZEYA YRSN	2 RSBs Y SSBN ZEYA YRSN	IDO	2 RSBs Y SSBN ZEYA YRSN	2 RSBs Y SSBN ZEYA YRSN	2 RSBs Y SSBN PM-124 YRSN
23				IDO			
24	2 barges Cable barge	2 barges Cable barge	2 barges Cable barge	IDO	2 barges Cable barge	2 barges Cable barge	2 barges Cable barge
Petrovka Nuclear Sup. Pac				IDO			

Key to Symbols
NC - not covered
CC - cloud covered
NA - none
ID - identification only
* Special consideration with training lower end
*** Training device on duty
*** Y SSBN moved into covered ship
2 Both submarines in the set
+ Lowered in deepening area
+ Covered last deflection

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16. (TSR) A Y SSBN which arrived at RP 3 by [] had moved to RP 2 by []. Between [] deck plating was removed, and by [] holes were in the reactor/machinery spaces. Between [] a work platform surrounded the opening. This unit is probably in the yard for a major overhaul.

17. (TSR) Between [] a Y SSBN arrived at RP 1. Between [] it either moved to RP 3 or left the yard. If this Y SSBN left the yard between [] the one at RP 3 on [] was a new arrival. The exact events are impossible to determine.

18. (TSR) Although there was transverser carriage activity between early December 1977 and early January 1978 while the two Y SSBNs were on the shelf, it is unlikely that either unit went into or came out of the repair hall. Usually a unit is opened and decontaminated prior to major overhaul, which was not done with either of these units. Additionally, a unit usually goes into a covered repair facility if it is undergoing a major overhaul. The Y SSBN which went into the hall in May 1977 could not have completed an overhaul recore/refueling operation in that short a time frame.

E-II-Class SSGN

19. (TSR) Overhaul/modification work continued on E-II SSGNs. Three E-II SSGNs were on the repairways through [] the E-II which had been at RP 15 was moved to RP 22, probably for post-overhaul workup. This submarine remained at RP 22 through []. On [] an E-II SSGN was observed at the degaussing area (RP 24); although RP 22 was cloud covered, this was probably the same submarine. By [] the submarine was being repositioned at RP 22 and had temporary covers over the blast deflectors (Figure 5) which are possibly used during degaussing. This submarine left Petrovka between []. The E-II SSGN at RP 14 remained there throughout the reporting period. By [] the missile tubes were being retrofitted. The third E-II SSGN was moved from RP 16 to RP 15 between []. Its sail had been removed, and overhaul/modification work was underway.

V-Class SSN

20. (TSR) Two V-I SSNs were present during the reporting period. The first one had arrived at RP 22 by []. The hull was opened in the area of the reactor and machinery spaces, and a work platform surrounded the opening. By [] the pressure hull appeared to have been closed, and the submarine left Petrovka between []. The second V-I SSN arrived at RP 5 by []. Transfer dollies for this submarine were in position on the basin shelf, and by [] the submarine had been moved to the repairway at RP 16 where it remained during the rest of the reporting period. No major overhaul work was observed on this unit.

N-Class SSN

21. (TSR) Although N SSNs were present at various times, no obvious external work was performed on any of these during this reporting period.

I-Class SSAG

22. (TSR) The I-class SSAG (auxiliary submarine), formerly 199D, was in the ARD(T) at RP 1 from [] through []. By [] this unit was at the fitting-out pier, RP 3, with one submersible alongside. By [] it had departed the shipyard. The training device associated with the I SSAG remained on the quay at RP 4 through []. The training device was subsequently seen at Vladivostok Submarine Base Ulisa Bay (BE []).

Z-Class SSAG

23. (TSR) The modification of Z-class SS to SSAG continued. The first unit remained at Petrovka throughout the reporting period and is presently outboard of the other Z SSAG at RP 20. The second unit, on which modification started in December 1975, had its bulbous bow removed in 1976. The pieces from the bow have remained in the yard behind the repairways. Training tower modifications to this Z SS continued through []. It had been launched and has continued its post-modification workup inboard of the first Z SSAG at RP 20. A Z-V SS (converted fleet ballistic missile submarine--SSB) arrived at Petrovka by []. The Z-V SS was being positioned in the basin, and by [] it was on the repairway at RP 13, where the two previous Z-class SSs had been modified. No modification work has begun on this unit.

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Other Activity

24. (TSR) By [] an export Petya-I small frigate (FFL), previously on the repairway at RP 17, was moved to RP 20 where it has remained. The construction of pier sections has continued at RP 17. Two pier sections were launched by [] and a third pier section was launched by [] Between [] the three sections were taken from Petrovka and were next seen at Vladivostok Shipyard Ullis [] [] two rectangular support barges (RSBs) were put on the new open repairway at RP 8. This was the first time this repairway had been used. These barges have been at this position through the remainder of the reporting period.

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REFERENCES**IMAGERY**

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MAPS OR CHARTS

SAC. US Air Target Chart, Series 200, Sheet 0291-6, scale 1:200,000 (UNCLASSIFIED)

DOCUMENTS

1. NPIC. [] RCA-09/0008/77, *Petrovka Naval Base and Shipyard (Shipyard Activities, July 1974--November 1976)*, May 77 (TOP SECRET [])
2. NPIC. [] RCA-09/0008/78, *Komsomolsk Shipyard Amur 199 (Shipyard Activities, [] Apr 78 (TOP SECRET [])*

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RELATED DOCUMENT

NPIC. [] RCA-09/0015/74, *Petrovka Naval Base and Shipyard (Shipyard Activities, April-June 1974)*, Sep 74 (TOP SECRET [])

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REQUIREMENT

COMIREX J01
Project 280059DJ

(S) Comments and queries regarding this report are welcome. They may be directed to [] Soviet Strategic Forces Division, Imagery Exploitation Group, NPIC, []

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